Howard Lan

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Education

Rice University — Houston, TX
Master of Computer Science (Data Science Specialization), 3.82 /4 — Graduating May 2021
- Coursework includes algorithms, machine learning, data visualization, oop programming, cloud computing, databases, computer systems, and more. TA for COMP 680: Statistics and Data Science.

University of Texas at Austin — Austin, TX
Bachelor of Science in Mathematics (Scientific Computation Specialization), 3.60 /4 — Aug 2014 – Dec 2018
- Coursework focused in statistics, applied math, scientific computing, and user experience.
- Activities: intramural soccer, math club, texas advanced computing center volunteer.

Experience

Cirrus Logic — Austin, TX
Data Science Intern (Product Engineering Team) — Summer 2018
Semiconductor company that designs audio products for companies like Apple and Samsung.
- Developed a web app (using R, Shiny framework), from conception to completion, to analyze silicon wafers and help engineers visually monitor false holds/false releases rates based on wafer bin limits.
- Consulted with product engineers, database administrators, and statisticians to design UI.
- Improved the speed of markov chain monte carlo algorithm greatly by using Rcpp and C++.
- Wrote complex SQL queries to retrieve silicon wafer data from Oracle database.
- Analyzed silicon wafer data using Python and Excel.

SAS Institute — Cary, NC
Software Developer Intern (Visual Analytics Team) — Summer 2016 and 2017
Analytics software company that provide a suite of software to help analyze, manage, and report data.
- Fixed over 30 high priority UI defects and worked on features in SAS Visual Analytics working with JavaScript/TypeScript, HTML, CSS, jQuery, and OpenUI5.
- Presented poster of summer work at intern expo to other interns and company leaders.
- Participated in A/B testing to help improve product usability.
- Collaborated with software developers, testers, managers, ux designers, and technical writers.

University of Texas at Austin — Austin, TX
Research Assistant (Linguistics Department) — Spring 2017
Member of a research group that focused on analyzing mixed language documents.
- Refactored Python code to improve maintainability.
- Increased the time to process large corpora significantly by using Python multiprocessing.
- Created visualizations and plots in R.

Skills

Languages: Python, R, Java, HTML, CSS, C++, SQL.
Big Data Tools: Hadoop, Spark, Hive.
Data Visualization: Python (Matplotlib, Plotly, Seaborn), R (ggplot, Plotly), Tableau.
Database Management Systems: MySQL, Oracle, MongoDB.

Summary

Current master's student at Rice who is passionate about mathematics and computer science. Looking for full time positions in data science and engineering starting June 2021.